



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/660,212

09/11/2003

William R. Belcourt

22873

6546

7590

08/16/2006

Vaughn W. North
THORPE NORTH & WESTERN, LLP
P.O. Box 1219
Sandy, UT 84091-1219

EXAMINER

WUJCIAK, ALFRED J

ART UNIT

PAPER NUMBER

3632

DATE MAILED: 08/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/660,212	BELCOURT ET AL.	
	Examiner	Art Unit	
	Alfred Joseph Wujciak III	3632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/12/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-27 and 30-33 is/are rejected.
- 7) ☒ Claim(s) 5,6,28 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is the final Office Action for the serial number 10/660,212, ICE SCREW HAVING BREAKAWAY OR FLEXING CRANK HANDLE, filed on 9/11/03.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7-19, 21-27 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent # 5,782,442 to Kwak et al and in view of US Patent # 6,607,340 to Petzl et al. (prior art from figure 2).

Kwak et al. teaches an ice screw (figure 1) comprising a hollow shaft (20) having a plurality of screw threads (22), a hanger (40) coupled to the hollow shaft and a flexing crank handle (60) coupled to the hanger. The flexing crank handle functions as a crank arm and comprising a mechanism. The mechanism includes a crank support means (88) for attaching the flexing crank handle to the hanger, a flexing member (figure 7) operable with the crank support means, and a sleeve (64) rotatable about the flexing member. The flexing member comprises a compression spring (76) supported within the sleeve and pre-load using a plunger (78) attached to crank support means (62) that fits within the sleeve. The spring has a predetermined stiffness. The flexing member comprises a spiral spring. The flexing member comprises an internal coil spring. The crank support means is a rigid rod pivotally attached to the hanger and a flexible

Art Unit: 3632

material. The hanger comprises a flex boundary (94) that dictates the flex path of the flexing crank handle and supports the flexing crank handle in the resting (90) and plurality of flexed positions (92 and 94). The flex boundary comprises a flat and a radius portion. The sleeve is a rotating sleeve (col. 4, line 51) that rotates about the flexing member. The flexing crank handle reduces cross-loading of an attached carabiner (col. 4, line 6) by flexing. The flexing crank handle comprises bi-directional flexing (spring). The flexing crank handle comprises vector flexing. The flex boundary is a multi-vector flex boundary defined by a knob (80) coupled to the hanger, wherein the knob has a semi-spherical surface shape allowing the flexing crank handle to flex in any direction about the surface.

Kwak et al. teaches the flexing crank handle and crank support means but fails to teach the crank handle is being configured to displace by flex in any direction from a resting position to a plurality of flexed position and to automatically return to the resting position without the need for manual manipulation and crank support means being flexed. Petzl et al. (prior art from figure 2) teaches the crank handle (22-23) being configured to displace by flex in any direction from a resting position to a plurality of flexed position and to automatically return to the resting position without the need for manual manipulation and the crank support means being flexed (18). It would have been obvious for one of ordinary skill in the art at the time the invention was made to have modified Kwak et al.'s crank handle to displace by flex in any direction from resting position to a plurality of flexed positions along the hanger and crank support means with flexible material as taught by Petzl et al. (prior art from figure 2) to provide convenience for returning the crank handle in the resting position from operative position without the need of manual manipulation.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kwak et al. in view of Petzl et al. (prior art from figure 2) and in further view of US Patent Application Publication # 2002/0074443 to Murdock et al.

Kwak et al. teaches the rotating sleeve but fails to teach the rotating sleeve comprises bearing. Murdock et al. teaches the rotating sleeve comprising bearing (29). It would have been obvious for one of ordinary skill in the art at the time the invention was made to have added the bearing to Kwak et al.'s rotating sleeve to provide efficient for rotating the sleeve about the flexing member.

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kwak et al. in view of Petzl et al. (prior art from figure 2).

Kwak et al. teaches an ice screw (figure 1) comprising a hollow shaft (20) having a plurality of screw threads (22), a hanger (40) coupled to the hollow shaft and a flexing crank handle (60) coupled to the hanger. The flexing crank handle functions as a crank arm and comprising a mechanism. The mechanism includes a crank support means (88) for attaching the flexing crank handle to the hanger, a flexing member (figure 7) operable with the crank support means, and a sleeve (64) rotatable about the flexing member. The flexing member comprises a compression spring (76) supported within the sleeve and pre-load using a plunger (78) attached to crank support means (62) that fits within the sleeve. The spring has a predetermined stiffness. The flexing member comprises a spiral spring. The flexing member comprises an internal coil spring. The crank support means is a rigid rod pivotally attached to the hanger and a flexible

Art Unit: 3632

material. The hanger comprises a flex boundary (94) that dictates the flex path of the flexing crank handle and supports the flexing crank handle in the resting (90) and plurality of flexed positions (92 and 94). The flex boundary comprises a flat and a radius portion. The sleeve is a rotating sleeve (col. 4, line 51) that rotates about the flexing member. The flexing crank handle reduces cross-loading of an attached carabiner (col. 4, line 6) by flexing. The flexing crank handle comprises bi-directional flexing (spring). The flexing crank handle comprises vector flexing. The flex boundary is a multi-vector flex boundary defined by a knob (80) coupled to the hanger, wherein the knob has a semi-spherical surface shape allowing the flexing crank handle to flex in any direction about the surface.

Kwak et al. teaches the flexing crank handle and crank support means but fails to teach the crank handle is being configured to displace by flex in any direction from a resting position to a plurality of flexed position and to automatically return to the resting position without the need for manual manipulation and crank support means being flexed. Petzl et al. (prior art in figure 2) teaches the crank handle (22-23) being configured to displace by flex in any direction from a resting position to a plurality of flexed position and to automatically return to the resting position without the need for manual manipulation and the crank support means being flexed (18). It would have been obvious for one of ordinary skill in the art at the time the invention was made to have modified Kwak et al.'s crank handle to displace by flex in any direction from resting position to a plurality of flexed positions along the hanger and crank support means with flexible material as taught by Petzl et al. (prior art from figure 2) to provide convenience for returning the crank handle in the resting position from operative position without the need of manual manipulation.

Kwak et al. in view of Petzl et al. teaches all elements but fails to teach the use of elements in method. It would have been obvious for one of ordinary skill in the art at the time the invention was made to have specified steps for screwing the ice screw into an ice body and attaching the carabiner to the screw to reduce the chance of accident when the ice screw is not properly installed.

Response to Arguments

Applicant's arguments filed 6/12/06 have been fully considered but they are not persuasive.

The applicant argues that the examiner made an error in his previous office action with 103 rejection because the reference with prior art from Petzl is taught by a different inventor which is the same inventor of the primary reference (Kwak). This is not considered as error because the examiner is aware that the figure 2 in Petzl is taught by a different inventor. In the office action, the examiner referred to figure 2 of prior art by Petzl when making the rejection which means Petzl admitted that figure 2 is done by a different inventor. The examiner did not state that Petzl is the inventor of figure 2 and the examiner used "Petzl" as a reference name to refer figure 2 for making the rejection.

Since the applicant fails to submit copy of FR-2,758,992, the rejection under Kwak et al. in view of Petzl is proper.

Allowable Subject Matter

Art Unit: 3632

Claims 5-6 and 28-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In regard to claims 5 and 28-29, the prior art fails to teach the flexing member comprises complimentary solid height coil springs attached opposite one another on the hanger. In regards to claim 6, the flexing member comprises a solid height coil spring attached within a recess formed in the hanger.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 3632

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alfred Joseph Wujciak III whose telephone number is (571) 272-6827. The examiner can normally be reached on 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on (571) 272-6815. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alfred Joseph Wujciak III
Primary Examiner
Art Unit 3632

A handwritten signature in black ink, appearing to read 'A. J. Wujciak III', written over the printed name of the examiner.

8/10/06